

REMARKS

Claims 1 through 4 have been canceled. Claims 5 and 9 have been amended.

Claims 5 through 9 remain in the application.

Claims 1 through 9 were rejected under 35 U.S.C. § 103 as being unpatentable over Buckley et al. (U.S. Patent No. 6,106,121) in view of ul Azam (U.S. Patent No. 5,566,224), Greanais et al. (U.S. Patent No. 5,149,919), Redmayne (U.S. Patent No. 5,650,597), and Jackson et al. (U.S. Patent No. 4,931,782). Claims 1 through 4 have been canceled and the rejection as to these claims is now moot. However, Applicant respectfully traverses this rejection as it applies to claims 5 through 9.

U.S. Patent No. 6,106,121 to Buckley et al. discloses a rear view mirror with an integrated matrix display. The mirror 10 includes a display, preferably a matrix display. A matrix display, generally designated 18, is disposed in front of a first transparent glass or plastic layer 20. The first layer 20 faces the driver of the vehicle 12, and thus is rearward, relative to the vehicle 12, of the matrix display 18 when the mirror 10 is mounted on the vehicle 12 as a rear view mirror. The matrix display 18 is a display selected from the group of matrix displays consisting of: active liquid crystal displays (LCD), passive liquid crystal displays, electroluminescent displays, vacuum fluorescent displays, and light emitting diode displays. Buckley et al. does not disclose a plurality of electrodes attached to a surface of a rearview mirror with the electrodes being closely coupled and defining a contact area, which is a region, when touched by an occupant changes electrical characteristics between the electrodes.

U.S. Patent No. 5,566,224 to ul Azam et al. discloses a radio frequency communication device including a mirrored surface. Input/output information can also consist of user-initiated control signaling that operates the functions of the RF communication device 100. Functional information of the RF communication device 100 may be "inputted" by the user

through an interface comprised of push-buttons, switches, knobs, and/or other controls. This interface is typically embodied as a keypad 111 coupled to the controller 104. The keypad 111 may allow the user to "power-on" the RF communication device 100 as well as, in the case of a cellular telephone, permit the user to input a number to be called. Ul Azam et al. does not disclose a plurality of electrodes attached to a surface of a rearview mirror with the electrodes being closely coupled and defining a contact area, which is a region, when touched by an occupant changes electrical characteristics between the electrodes.

U.S. Patent No. 5,149,919 to Greanais et al. discloses a stylus sensing system. A workpad 10 comprises a housing 12 having a rectangular recessed window 14 which surrounds the edges of a rectangular touch overlay 16. The overlay 16 is transparent and is disposed on a liquid crystal display (LCD) 18. The overlay 16 consists of a laminate structure including several plastic substrate layers laminated together by means of adhesive layers also including a first plurality of transparent conductors 16A disposed in the horizontal direction and a second plurality of transparent conductors 16B disposed in the vertical direction. Several of the conductors in both vertical and horizontal directions are positioned beyond the recessed window 14 to allow more accurate location determination of the stylus 20 or a finger on the LCD 18 at the edges of the display window 14. Greanais does not disclose a plurality of electrodes attached to a surface of a rearview mirror with the electrodes being closely coupled and defining a contact area, which is a region, when touched by an occupant changes electrical characteristics between the electrodes.

U.S. Patent No. 5,650,597 to Redmayne discloses a capacitive touch sensor. A touch screen or capacitive touch sensor 15 includes a capacitive sensor array 20 which is operatively associated with a display 22. Capacitive touch sensor 15 may be used with a variety of display devices, such as a CRT, LCD, projector, printed overlay, printed underlay or other

arrangement which provides display information from which a user makes a selection. Alternatively, capacitive touch sensor 15 may be a hand held tablet or other device located proximate a display, such as a billboard, sign, or menu. The user may touch sensor 15 to select data or otherwise provide information. Redmayne does not disclose a plurality of electrodes attached to a surface of a rearview mirror with the electrodes being closely coupled and defining a contact area, which is a region, when touched by an occupant changes electrical characteristics between the electrodes.

U.S. Patent No. 4,931,782 to Jackson et al. discloses a touch screen overlay with improved conductor durability. The touch screen overlay 10 is attached by suitable means to the display screen of the CRT 12. A plurality of transparent conductors disposed vertically and horizontally in different layers of the overlay form a grid pattern of conductors shown generally by reference number 11 in the overlay 10. Electrical signals from the transparent conductors of the overlay are transmitted via these buses to a flexible circuit 18 which is connected to the control processor 22 via a cable and connectors shown generally as 20. Electronics in the control processor 22 is also able to detect the position of a finger touch through the change in capacitance between conductors at the corresponding location on the overlay 10. Jackson et al. does not disclose a plurality of electrodes attached to a surface of a rearview mirror with the electrodes being closely coupled and defining a contact area, which is a region, when touched by an occupant changes electrical characteristics between the electrodes.

In contradistinction, claim 5, as amended, clarifies the invention claimed as a rearview mirror assembly for an automotive vehicle including a rearview mirror adapted to be disposed in an interior of the automotive vehicle and a layer of liquid crystal having a first perimeter and defined to be within the physical boundaries of the rearview mirror. The rearview mirror assembly also includes a plurality of first electrodes attached to a surface of the rearview mirror.

The first electrodes are closely coupled defining a contact area, the contact area being a region, when touched by an occupant changes electrical characteristics between the first electrodes. Claim 9 is similar to claim 5 and includes other features of the present invention.

The United States Court of Appeals for the Federal Circuit (CAFC) has stated in determining the propriety of a rejection under 35 U.S.C. § 103, it is well settled that the obviousness of an invention cannot be established by combining the teachings of the prior art absent some teaching, suggestion or incentive supporting the combination. See In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 227 U.S.P.Q. 657 (Fed. Cir. 1985); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 221 U.S.P.Q. 929 (Fed. Cir. 1984). The law followed by our court of review and the Board of Patent Appeals and Interferences is that “[a] prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art.” In re Rinehart, 531 F.2d 1048, 1051, 189 U.S.P.Q. 143, 147 (C.C.P.A. 1976). See also In re Lalu, 747 F.2d 703, 705, 223 U.S.P.Q. 1257, 1258 (Fed. Cir. 1984) (“In determining whether a case of prima facie obviousness exists, it is necessary to ascertain whether the prior art teachings would appear to be sufficient to one of ordinary skill in the art to suggest making the claimed substitution or other modification.”)

None of the references cited, either alone or in combination with each other, teach or suggest the claimed invention of claims 5 through 9. Specifically, Buckley et al. ‘121 merely discloses a rear view mirror with an integrated matrix display in which the mirror is mounted on a vehicle as a rear view mirror and the matrix display is an active liquid crystal display (LCD). Buckley et al. ‘121 lacks a rearview mirror assembly having a plurality of electrodes attached to a surface of a rearview mirror with the electrodes being closely coupled and defining a contact

area, which is a region, when touched by an occupant changes electrical characteristics between the electrodes.

Ul Azam et al. '224 merely discloses a radio frequency communication device including a mirrored surface in which functional information of the RF communication device may be "inputted" by the user through an interface comprised of a keypad coupled to a controller. Ul Azam '224 lacks a rearview mirror assembly having a plurality of electrodes attached to a surface of a rearview mirror with the electrodes being closely coupled and defining a contact area, which is a region, when touched by an occupant changes electrical characteristics between the electrodes. In ul Azam '224, the keypad is not part of the glass surface of the rear view mirror. Contrary to the Examiner's opinion, there is no touch screen on the rearview mirror of ul Azam '224. The Examiner may not, because he/she doubts that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in the factual basis. See In re Warner, 379 F. 2d 1011, 154 U.S.P.Q. 173 (C.C.P.A. 1967).

Greanais et al. '919 merely discloses a stylus sensing system in which conductors in both vertical and horizontal directions are positioned beyond a recessed window to allow more accurate location determination of a stylus or a finger on an LCD at the edges of a display window. Greanais et al. '919 lacks a rearview mirror assembly having a plurality of electrodes attached to a surface of a rearview mirror with the electrodes being closely coupled and defining a contact area, which is a region, when touched by an occupant changes electrical characteristics between the electrodes.

Redmayne '597 merely discloses a capacitive touch sensor in which a user may touch the sensor to select data or otherwise provide information. Redmayne '597 lacks a rearview mirror assembly having a plurality of electrodes attached to a surface of a rearview

mirror with the electrodes being closely coupled and defining a contact area, which is a region, when touched by an occupant changes electrical characteristics between the electrodes.

Jackson et al. '782 merely discloses a touch screen overlay with improved conductor durability in which electronics in a control processor is able to detect the position of a finger touch through the change in capacitance between conductors at the corresponding location on the overlay. Jackson et al. '782 lacks a rearview mirror assembly having a plurality of electrodes attached to a surface of a rearview mirror with the electrodes being closely coupled and defining a contact area, which is a region, when touched by an occupant changes electrical characteristics between the electrodes. Thus, there is no suggestion or motivation in the art to combine Buckley et al. '121, ul Azam '224, Greanais et al. '919, Redmayne '597, and Jackson et al. '782 together.

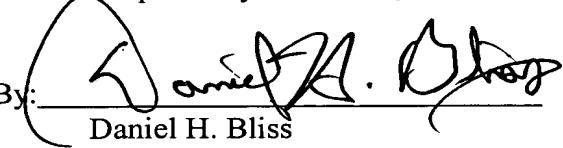
The present invention sets forth a unique and non-obvious combination of a rearview mirror assembly that is the integration of the rearview mirror, an LCD, and a selection device so that the rearview mirror acts as a multi-function device and as a display platform and as a device to control the displayed information. The references, if combinable, fail to teach or suggest the combination of a rearview mirror assembly for an automotive vehicle including a rearview mirror adapted to be disposed in an interior of the automotive vehicle, a layer of liquid crystal having a first perimeter and defined to be within the physical boundaries of the rearview mirror, and a plurality of first electrodes attached to a surface of the rearview mirror, the first electrodes being closely coupled defining a contact area, the contact area being a region, when touched by an occupant changes electrical characteristics between the first electrodes as claimed by Applicant.

Further, the CAFC has held that “[t]he mere fact that prior art could be so modified would not have made the modification obvious unless the prior art suggested the

desirability of the modification". In re Gordon, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). The Examiner has failed to show how the prior art suggested the desirability of modification to achieve Applicant's invention. Thus, the Examiner has failed to establish a case of prima facie obviousness. Therefore, it is respectfully submitted that claims 5 through 9 are allowable over the rejection under 35 U.S.C. § 103.

Obviousness under § 103 is a legal conclusion based on factual evidence (In re Fine, 837 F.2d 1071, 1073, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988), and the subjective opinion of the Examiner as to what is or is not obvious, without evidence in support thereof, does not suffice. Since the Examiner has not provided a sufficient factual basis, which is supportive of his/her position (see In re Warner, 379 F.2d 1011, 1017, 154 U.S.P.Q. 173, 178 (C.C.P.A. 1967), cert. denied, 389 U.S. 1057 (1968)), the rejection of claims 5 through 9 is improper. Therefore, it is respectfully submitted that claims 5 through 9 are allowable over the rejection under 35 U.S.C. § 103.

Based on the above, it is respectfully submitted that the claims are in a condition for allowance, which allowance is solicited.

Respectfully submitted,
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